

[54] **LINEAR ACTUATOR FOR A MEMORY STORAGE APPARATUS**

[75] Inventors: **Paul L. Farmer**, San Martin; **Frank C. Gibeau**, Los Altos; **Stanley F. Brown**, Cupertino; **Garold W. Plonczak**, Santa Clara, all of Calif.

[73] Assignee: **Atasi Corporation**, San Jose, Calif.

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[58] Field of Search ..... **360/106; 310/12, 13; 318/38, 135**

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*Primary Examiner*—Stuart N. Hecker

*Attorney, Agent, or Firm*—Alan H. MacPherson;  
Thomas S. MacDonald; Steven F. Caserza

[57] **ABSTRACT**

A dual motor linear actuator is disclosed for use in a magnetic disc drive device. It includes a carriage reciprocatably guided between a pair of guide rails, with the accessing transducers being mounted to its inner end. Separate rectangular drive coils are affixed in symmetrical outboard relationship at the sides of the body of the carriage. The actuator assembly further includes two pairs of slab shaped magnets mounted to E-shaped magnet support structures that are integrally formed with the base of the disc drive device. The magnets are mounted to form two air gaps that are symmetrically disposed relative to a center plane and so that they respectively cooperate with the drive coils to apply motive forces on the carriage generally along two lines that are equidistantly spaced from the aforesaid plane of symmetry. The outer ends of pole pieces of the two magnet support structures are rigidly interconnected by a single plate that acts as an end pole piece for both magnet support structures.

**21 Claims, 4 Drawing Figures**

